

November 28, 2000

Dr. Howard Hiatt  
American Academy of Arts and Sciences  
Norton's Woods  
136 Irving Street  
Cambridge, MA 02138-1996

Dear Howard:

Soon after we met at the AAMC meeting in Savannah, you sent me a letter seeking advice about the Academy's Initiatives for Children programs. I am sorry that a lot of travel has interfered with my giving you a prompt response. Finally, here are some thoughts. I hope it is not too late to contribute to the agenda you are planning.

First of all I would like to say that Mosteller's emphasis on evaluation is widely admired. Those of us who are active in K-12 science and math education know very well that many of the standard assessment tools are seriously flawed. Having someone like Fred contributing to the development of evaluation policies and methods is an enormous contribution.

The primary point I would like to make concerns the role of the universities in K-12 science and math education, but it is somewhat different from the emphasis in the materials you sent to me. I start by asking a question, whose answer I do not know, but suspect. Where is it that most teachers are educated and trained? I suspect that the answer would be universities and colleges other than the major research universities, though, of course, the research universities educate some portion of those who become K-12 teachers. If, as I suspect, most teachers are educated elsewhere, then there should be an emphasis on those schools. The interest of many accomplished scientists to contribute to this problem is laudable, but is the focus correct? Many teachers are educated in schools of education. What we know about that education is that it does not promote a truly 'professional' training, with all that it implies for professions such as business, law, medicine, and research. For example, most teachers are not made aware of the latest research in education nor are they trained to keep up with that research during their years of active teaching. In addition, there is little professional interaction among teachers, each of whom generally operates behind a closed door.

Again, the education of teachers does not generally promote such interactions or instruct as to their importance for continual learning and self-criticism. These issues are on top of the issues of the education for the content of what they will teach. For me, the strongest evidence for these shortcomings comes from young, well educated people who try teaching (such as those recruited by Teach for America) and within a couple of years opt out citing the lack of a stimulating, professional environment.

Thus, I believe that the Academy might well study the current situation at schools of education with respect to their curriculum and requirements for admission and graduation. I believe that this will be met with some resistance, as most of the schools that actually educate most of the teachers (this leaves out the graduate schools of education) are resistant to change.

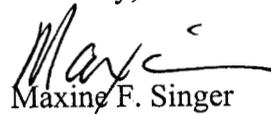
In several universities I have visited or heard about, the administration had to introduce enhanced education for would-be teachers outside of the school of education, because of a lack of interest and cooperation. Yet, these schools continue to educate most of the future teachers thereby perpetuating the problems we now have.

My comments are necessarily brief and anecdotal. A thorough airing of these issues could, I believe, serve the public interest in improving K-12 education. The ideal outcome would be a wholesale revision of teacher preparation, much like the Flexner report did for medical education at the beginning of the last century.

I hope this is helpful.

Very best regards,

Sincerely,

A handwritten signature in black ink, appearing to read "Maxine F. Singer". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Maxine F. Singer  
President